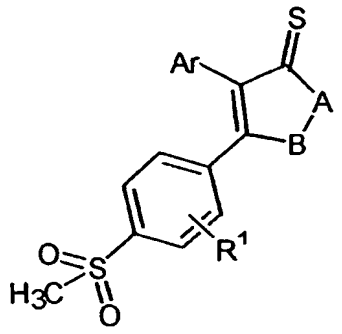
What is claimed is:

1. A thione derivative represented by formula 1:

Formula 1



wherein:

A and B each independently represent O, S, NR^2; wherein R^2 represents hydrogen, C_1-C_4 alkyl, C_1-C_4 alkenyl, or aryl;

Ar represents aryl; heteroaryl; aryl or heteroaryl substituted with one to five radicals independently selected from the group consisting of C_1-C_4 alkyl, C_1-C_4 alkoxy, halogen, trifluoromethyl, nitro, acetoxy, amino, C_1-C_3 alkylamino, C_1-C_3 dialkylamino, hydroxy, C_1-C_3 hydroxyalkyl, and thioxy; and

R^1 represents hydrogen, C_1-C_4 alkyl, C_1-C_4 alkoxy, halogen, cyano, nitro, hydroxy, amino, C_1-C_4 alkylamino, or C_1-C_4 dialkylamino;

or a non-toxic salt thereof.

2. The thione derivative according to claim 1 wherein

A and B each independently represent S or NH;

Ar represents phenyl; phenyl substituted with one to five radicals independently selected from the group consisting of C_1-C_4 alkyl, C_1-C_4 alkoxy, halogen, trifluoromethyl, acetoxy, and nitro; pyridyl; or naphthyl;

R^1 represents hydrogen or halogen;

or a non-toxic salt thereof.

3. The thione derivative according to claim 1 or claim 2, which is selected from the group consisting of:

4-(4-ethoxyphenyl)-5-(4-methanesulfonylphenyl)-[1,2]dithiol-3-thio

ne;
4-(4-bromophenyl)-5-(4-methanesulfonylphenyl)-[1,2]dithiol-3-thio
ne;
5-(4-methanesulfonylphenyl)-4-toryl-[1,2]dithiol-3-thione;
5-(4-methanesulfonylphenyl)-4-phenyl-[1,2]dithiol-3-thione;
5-(4-methanesulfonylphenyl)-4-methoxyphenyl-[1,2]dithiol-3-thion
e;
5-(4-methanesulfonylphenyl)-4-(2-trifluoromethylphenyl)-[1,2]dithio
l-3-thione;
4-(4-chlorophenyl)-5-(4-methanesulfonylphenyl)-[1,2]dithiol-3-thion
e;
4-(3,4-dichlorophenyl)-5-(4-methanesulfonylphenyl)-[1,2]dithiol-3-t
hione;
5-(4-methanesulfonylphenyl)-4-pyridine-4-yl-[1,2]dithiol-3-thione;
5-(4-methanesulfonylphenyl)-4-pyridine-3-yl-[1,2]dithiol-3-thione;
5-(4-methanesulfonylphenyl)-4-pyridine-2-yl-[1,2]dithiol-3-thione;
4-(4-fluorophenyl)-5-(4-methanesulfonylphenyl)-[1,2]dithiol-3-thion
e;
4-(2,5-dimethoxyphenyl)-5-(4-methanesulfonylphenyl)-[1,2]dithiol-
3-thione;
4-(3,5-dimethylphenyl)-5-(4-methanesulfonylphenyl)-[1,2]dithiol-3-t
hione;
5-(4-methanesulfonylphenyl)-4-(3-methoxyphenyl)-[1,2]dithiol-3-thi
one;
5-(4-methanesulfonylphenyl)-4-(2-nitrophenyl)-[1,2]dithiol-3-thione
;
5-(4-methanesulfonylphenyl)-4-(3-trifluoromethylphenyl)-[1,2]dithio
l-3-thione;
5-(4-methanesulfonylphenyl)-4-o-toryl-[1,2]dithiol-3-thione;
4-(2-chlorophenyl)-5-(4-methanesulfonylphenyl)-[1,2]dithiol-3-thion
e;
4-(2,4-dichlorophenyl)-5-(4-methanesulfonylphenyl)-[1,2]dithiol-3-t
hione;
4-(2-chloro-4-fluorophenyl)-5-(4-methanesulfonylphenyl)-[1,2]dithi
ol-3-thione;
4-(3,4-dimethoxyphenyl)-5-(4-methanesulfonylphenyl)-[1,2]dithiol-
3-thione;

4-(2-bromophenyl)-5-(4-methanesulfonylphenyl)-[1,2]dithiol-3-thione;

4-(2-fluorophenyl)-5-(4-methanesulfonylphenyl)-[1,2]dithiol-3-thione;

4-(2,4-difluorophenyl)-5-(4-methanesulfonylphenyl)-[1,2]dithiol-3-thione;

4-(3,4-difluorophenyl)-5-(4-methanesulfonylphenyl)-[1,2]dithiol-3-thione;

5-(4-methanesulfonylphenyl)-4-naphthalene-2-yl-[1,2]dithiol-3-thione;

5-(4-methanesulfonylphenyl)-4-pentafluorophenyl-[1,2]dithiol-3-thione;

4-(4-isopropoxylphenyl)-5-(4-methanesulfonylphenyl)-[1,2]dithiol-3-thione;

5-(4-methanesulfonylphenyl)-4-(4-propoxyphenyl)-[1,2]dithiol-3-thione;

acetic acid 4-[5-(4-methanesulfonylphenyl)-3-thioxo-3H-[1,2]dithiol-4-yl]phenyl ester;

5-(2-chloro-4-methanesulfonylphenyl)-4-(4-ethoxyphenyl)-[1,2]dithiol-3-thione;

5-(2-chloro-4-methanesulfonylphenyl)-4-*p*-toryl-[1,2]dithiol-3-thione;

4-(4-bromophenyl)-5-(2-chloro-4-methanesulfonylphenyl)-[1,2]dithiol-3-thione;

5-(2-chloro-4-methanesulfonylphenyl)-4-(4-methoxyphenyl)-[1,2]dithiol-3-thione:

5-(3-fluoro-4-methanesulfonylphenyl)-4-p-toryl-[1,2]dithiol-3-thione;

5-(3-fluoro-4-methanesulfonylphenyl)-4-(4-methoxyphenyl)-[1,2]dithiol-3-thione;

acetic acid 4-[5-(3-fluoro-4-methanesulfonylphenyl)-3-thioxo-3H-[1,2]dithiol-4-yl]-phenyl ester;

5-(4-methanesulfonylphenyl)-4-*p*-toryl-1,2-dihydropyrazole-3-thione;

4-(3,4-dichlorophenyl)-5-(4-methanesulfonylphenyl)-1,2-dihydropyrazole-3-thione; and

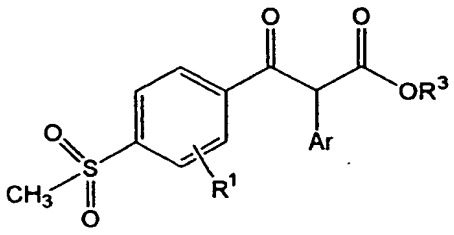
4-(4-chlorophenyl)-5-(4-methanesulfonylphenyl)-1,2-dihydropyrazo

le-3-thione

or a non-toxic salt thereof.

4. A propionic acid derivative represented by formula 2:

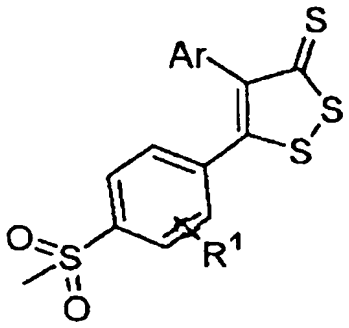
Formula 2



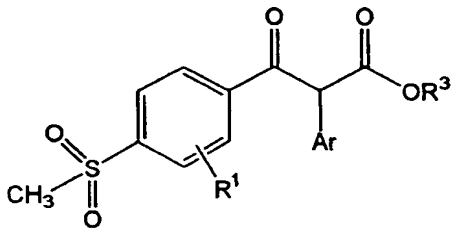
wherein, R^1 and Ar are as defined in claim 1 and R^3 represents C_1-C_4 alkyl.

5. A method for preparing a thione derivative of formula 1a or a non-toxic salt thereof, comprising reacting a propionic acid derivative of formula 2 with phosphorus pentasulfide, Lawesson's Reagent, beta-oxothioctic acid, or potassium beta-oxothioctate:

Formula 1a



Formula 2



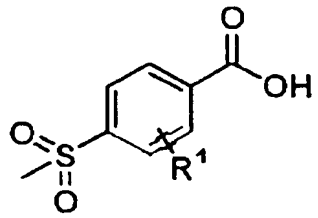
wherein:

R^1 and Ar are as defined in claim 1;

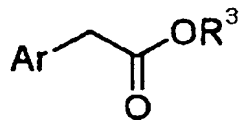
R^3 represents C_1-C_3 alkyl.

6. A method according to claim 5, wherein the propionic acid derivative of formula 2 is prepared by reacting a methanesulfonylbenzoic acid derivative of formula 3 with a aryl acetate derivative of formula 4 in the presence of a base;

Formula 3



Formula 4

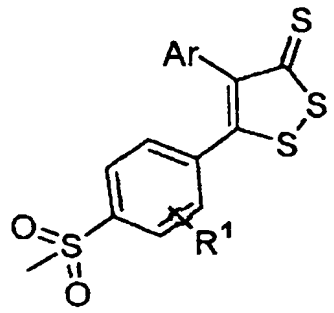


wherein:

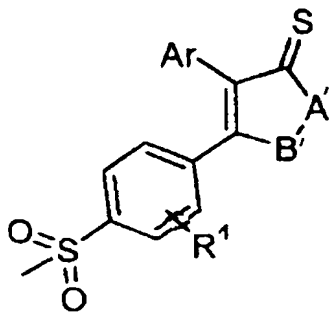
R^1 and Ar are as defined in claim 1 and R^3 represents C_1-C_4 alkyl.

7. A method for preparing a thione derivative of formula 1b or a non-toxic salt thereof, comprising reacting a thione derivative of formula 1a with $NHR^2NH\ R^2$ or $NH\ R^2OH$ in the presence of a base;

Formula 1a



Formula 1b



wherein:

A' and B' each independently represent S or NR^2, provided that A' and B' are not simultaneously S; and

Ar and R^2 are as defined in claim 1.

8. A pharmaceutical composition comprising a therapeutically effective amount of a thione derivative or a non-toxic salt thereof according to claim 1 to claim 3 as an active ingredient and a pharmaceutically acceptable carrier for the treatment of fever, pain, and inflammation.